DISCLOSURE OF THE ABSTRACT

It is an object of the present invention to reduce the constraint that the density ratio is constant as small as possible, and to obtain high power recovering effect in a wide operation range. A refrigeration cycle apparatus uses carbon dioxide as refrigerant and has a compressor, an outdoor heat exchanger, an expander and an indoor heat exchanger. An injection circuit for introducing high pressure refrigerant is provided in a halfway of an expansion process of said expander.